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IMITATION BUTTER

This includes all those preparations, under different titles, which are made from animal fats and sold in all parts of our country in place of butter. Whether beef fat, or lard, or tallow, or other substance is the basis of the production, it has generally been known by the distinctive name of Oleomargarine. We are not of those who would call hard names, and bestow harsh epithets upon the manufacturers of imitation butter. Neither are we disposed to assert that these imitations are composed of filthy substances; for it is to the interest of the manufacturers to make as good an imitation of real butter as they can possibly make, and that, as cleanly and sweet as possible. It is also for their interest to obtain as pure and good materials as can be had, out of which to manufacture their imitation butter; so that it is unnecessary to stigmatize their substitute by any unfounded assertions, which we might find it very hard to prove. We know that these manufacturers claim that they are very partic-

ular to secure only the best and finest beef fats, out of which, after many washings and cleansings they manufacture a perfectly pure and healthy article to take the place of butter, and which can be had at much less cost. They also claim that while it does not have the decided butterine taste, it is still superior to a large, perhaps the largest, portion of butter that is brought to market.

In our view it is unnecessary to combat any of these statements at present. Some of them are undoubtedly true: some of them may be questioned, and some may be ultimately found to have no foundation in fact. It is, however, unnecessary to discuss these points at present, simply because more vital ones are pressing upon us. We should look upon the matter calmly, weigh carefully all the circumstances, and act judiciously.

This fact is self evident, that a vast amount of this imitation butter has been and is now sold; and it is sold as real butter.

The consequence is that the dairy interests of our country are suffering to a large extent. The interests represent in the aggregate many millions of dollars, and millions of our citizens are dependent upon them in a great measure for their prosperity, even for their daily bread.

It is claimed by the farmers that their interests should be properly protected by our Government, and that these millions of industrious families should not be deprived of their means of support, by a few manufacturers who imitate their productions, and by under-selling them drive the genuine out of the market; substituting their imitation and selling it as the real. The farmers claim, and rightfully claim that, in this case, the imitation becomes a base counterfeit and should be treated as all counterfeits are treated in the eye of the law. They claim that if the making of this imitation butter is allowed, it should be so regulated that every purchaser would know at a glance that it was not genuine butter; but was an article made as a substitute. They claim, that so much is at stake in this matter that the government should not delay action; but should place the manufactories at once under a supervision, that would insure the people at large from being imposed upon in the sale of the imitation for the real; and would also insure the farming community that the manufactured article can no longer be sold for anything different from what it actually is.

In this connection we would quote from the address of JOSEPH H. REALL, President of the American Agricultural and Dairy Association, before the Committee on Agriculture, in Washington, April 3d.

"The Convention at New York was composed of representatives from twenty-three States and Territories, and included members of Congress and State Legislatures, Masters of State Granges, Secretaries

of State Agricultural Societies and Boards of Agriculture, delegates from the New York Produce Exchange, New York Mercantile Exchange, State and County dairy associations and other organizations. It was the largest and most important gathering of dairymen and their representatives ever held; and after several hours' earnest discussion resolutions were unanimously adopted calling upon Congress to pass an act placing the manufacture and sale of all imitation of butter under the control of the United States department of Internal Revenue, and taxing them at least ten cents per pound. It was the unanimous sentiment that this was the only way to curb the evil, and while many favored a tax of 25 cents per pound it was determined to make such a reasonable request that Congress would at once grant it.

It was clearly shown in that convention that such measures as were decided upon were absolutely necessary to save the dairy industry from ruin. In accordance with the earnest, unanimous voice of this great convention, the solicitor and secretary of the Association prepared the bill introduced by Mr. Scott, of Pennsylvania, which represents the demands of the entire dairy industry of America. In urging the adoption of this measure, I speak in behalf of the owners of 15,000,000 milch cows employed in the production of butter and cheese, worth \$600,000,000 at \$40 per head, and with the land and buildings representing an investment of over \$2,000,000,000, and employing in addition to the private systems of making over 8,000 creameries and cheese factories. These fifteen million cows produce sixteen hundred million pounds of butter and four hundred million pounds of cheese annually, worth four hundred million dollars under normal conditions.

During the Franco-Prussian war, when Paris was without butter, one Mege invented a substitute made from animal fat. His system was subsequently patented in the United States, and the manufacture began in 1872 or 1873, in New York.

Its growth was slow in the beginning, but its progress as insidious as that of many of the terrible diseases that inflict humanity, for it offered large reward to those interested. While the honest butter

maker was pursuing his vocation, thoughtless of danger, toiling from morn till night, week after week, month after month, year after year, cultivating and bettering his land, caring for and improving his stock, developing a still better and better quality of butter, thus adding to the welfare of his community and his country, his market was being destroyed by a fraudulent compound, manufactured and sold in imitation of his product. Lard was finally substituted for some of the other fats in the manufacture of the counterfeit, and its cost being cheapened thereby and additional capital interested, factories grew up in all parts of the country until now at least 200,000,000 pounds of the fraudulent stuff are manufactured annually, which not only takes the place of so much natural butter, but stops the consumption of at least 200,000,000 pounds more through the suspicion created in the minds of the consumer, of everything resembling butter."

These facts, as stated by President Reall, should have a decided influence in shaping public opinion, and we feel that all who have the welfare of our agricultural interests at heart, should add the weight of their influence in the same direction. Let the word go forth with no uncertain sound, that the interests of the makers of butter must be adequately protected by our government, and that the imitation, must be made in such a manner that every purchaser will know at a glance that it is manufactured as a substitute for genuine butter.

OUR FOREIGN LETTER.

PARIS, APRIL 1st, 1886.

There can be no good grass land without an adequate supply of water, either supplied by nature, or art. This is why England, Holland, Belgium, French Flanders, Normandy, and the Vosges, are superior to other countries in meadows. Land of ordinary consistency, and well tilled, suits admirably the grasses; compact clays, grass fairly, but the plants do not grow high. As clovers die out rapidly, not many are relied upon when laying the

land down to grass; white clovers are preferred in any case. It has been estimated, that a remunerative meadow, to have a close bottom, ought to have 7,000 grass stems to the square yard.

In Germany a little luzern, or sainfoin, or lupuline, etc., are added—two pounds per acre, following the soil. There are localities in France and Germany, where the farmers grow their own grass seeds, on specially set apart spots, each confining himself to a selection of varieties, and ultimately making an exchange. To keep pasture in good heart, to make it "grow early and late," it must be aided, as in time it becomes impaired. This end can be attained, by a liberal and judicious use of artificial manures, and a reliance, as the case may be, on feeding stuffs for cattle at grass. Good meadows ought to turn out about 1½ cwt., or about 160 lbs. of beef or mutton per acre.

Professor Lotz of Weimar, has examined the heat conducting power of litter; the three materials tested, were straw, turf and saw-dust. Straw possessed the least heat conducting power, then turf, and lastly saw-dust. He recommends in winter, and where practicable, to employ saw-dust as an underlayer for the straw. Of course the turf is valuable, in any case when impregnated with excrements. In the case of hatching machines, M. Lotz urges, that the runs for the chicks, ought to be carpeted with cut straw. The little strangers seem ever happy in a bran covered play ground, and when they commence to pick, seem to relish what they find.

Messrs. Muntz and Girard, are entrusted by the French Government to study the influence of shed-feeding of sheep, on the production of manure, when the ailments are administered green or dry, and of the relative per centage of elements returned to fertilize the soil, when the sheep were folded or housed. The conclusions of these scientists are briefly these: about one half of the nitrogen in the food given, whether in a green or dry state, is lost; that is, passes into the manure; this feeding loss is greater, the richer the food is in azote, in other words, the manure will be more nitrogenous. If earth be employed as litter, nearly all the nitrogen of the excrements will be retained; earth is more effi-

cacious than straw as bedding. Now when sheep are folded, the same results were observed; the soil acted like the clay-bedding, and absorbed the nitrogen of the urine, etc. but not to a greater degree, than when the animals were kept in shed, and had a loose bed of earth. Thus, the immemorial practice of penning or parking sheep, has been borne out by the most carefully conducted experiments of the above named chemists.

French farmers rely very largely on wheat as a remunerative crop. A good yield of corn depends on three factors; manure, choice of seeds, and process of culture. Experiments have shown that the same wheat may vary one hundred fold in return, according as the three conditions above mentioned, are observed. It is the common complaint that it costs too much to cultivate wheat. The cost depends on the rent and taxes, that is to say the price of the land; the expenses of labor, and manure—the latter indirectly by rearing fat stock. Apart from all this, there is a crisis in land, rather than in its cultivation.

Much attention is drawn to a very superior variety of oats, grown in Schleswig—Holstein, near the gulf of Riel, known as the "Probstir." It is in especial favor as a feed for carriage and saddle horses. It is remarkably prolific, and the weight per bushel, very superior.

M. Briechn has been occupied studying the quality of beets, when preserved in silos, in connection with the changes it there undergoes. We know beet thus stored, loses in sugar, while the quantity of water feebly augments. This increase of water, is not due as M. Hellriegel concluded, to the mechanical state in which the root was stored, but to a metamorphosis in the chemical principles of the beet. And thus augmentation continues, in proportion to the duration of the storing. The change should be taken into account, in estimating the saccharine richness of the beet.

The cows of Oldenbourg are reputed as being capital milkers. There was recently a local show, where prizes were awarded for the best milkers. The cows competing, were tied up in a shed at a fixed hour, after being milked dry. Their owners were allowed to feed them as they pleased, but grass was served all round. A commission was present at the milking, which commenced in the evening, the fol-

lowing morning and the succeeding noon. The highest yield was $26\frac{1}{2}$, and the lowest 17 quarts. The animal which won the blue ribbon represented a live weight of 9 cwt. At the annual agricultural show just held in this city, the *Bretonne* or Brittany race of cows, won general admiration. In fact, since it has been crossed with the Durham, it has become a universal favorite. It is proverbially the poor man's cow, and the one that he ought to select, if even he has the chance to obtain say—the "three acres." It is the rich man's toy cow also, as it furnishes a most delicate, fine, and nutty-flavored butter. The cradle of the race is Morbihan, one of the five departments of the ancient provinces of Bretagne, or Brittany, and it is the breed of the region.

As Brittany is a poor country the cow naturally is adopted to inferior classes of soils. Some assert, the Brittany cow is a Mongrel Dutch animal; others, that it comes in direct line from India, like its presumed relatives, around Bordeaux. The true Brittany cow, has a piebald hide—white and black; the latter is the color of the muzzle. The belly is very large. The height, is 39 to 41 inches; eye lively, head, short, delicate and small; horns fine, white at roots and black at points; or, if wholly white, the animal is more esteemed, as suggesting greater fineness. Further it is an advantage to have the horns short.

The udder, yellow, oval in shape, and advanced forwards, is voluminous; the milk veins are large and flexible, the animal does not yield a large quantity of milk, not more than five to six quarts daily; there are varieties which yield double; however, it is a small feeder. But it is the richness of the milk in butter, and the latter of so exquisite a nutty flavor—a quality seeming, by hereditary, which stamps the superior character of the breed. The people of Brittany when alluding to the goodness of their cow, do not say, she yields so many quarts of milk, but from 4 to 7 lbs. of butter, weekly. And this is invaluable for a country, where the transport of milk is a physical difficulty. About $4\frac{1}{2}$ lbs of butter, are obtained from 25 quarts of milk. Now in the fat pasture lands of Normandy, it requires 32 quarts of milk following the experiments of M. Marie to yield $2\frac{1}{4}$ lbs of butter; and $2\frac{1}{4}$ lbs of hay with the *Bretonne* are necessary to produce $\frac{3}{4}$ of a

pint of milk, while for the latter, in the case of a Normandy cow, the demand is $4\frac{1}{2}$ to $6\frac{1}{2}$ lbs. of hay.

Half breed Durham bulls, cross well with Britany cows. Ayrshires have been tried, but not with marked success. because the crossing only developed the defects of the race—narrow chest and bad hind quarters. Besides, while Ayrshires yield a good cheese—producing milk, the latter lacks buttery richness. The Jersey has too many weak points as a crosser, and is too voluptuous and dainty a feeder. For droughty and waste, or sandy lands, the Britany cow is incomparable; but if too highly fed, she will run into flesh. The Britany ox is a servicable draught animal, wiry, hardy, and mild.

It can be put into harness at 16 or 12 months old, and is worked till six or eight years: In winter it is fed on a little hay, wheat or oaten straw, crushed rushes, some cabbage, then sent to seek what it can pick up on the wastes. When fattened, especially on the coast districts, the flesh is savory, close grained, and marbled, and is much esteemed in the Paris and English markets. To fatten, it is enclosed in a pet pasture, aided by green rye, bran or oats.

DEER CREEK FARMERS' CLUB.

The topic selected for discussion was as follows:

"How can farmers economize in order to counterbalance the low price of their products?" Johns H. Janney, the host, adverted to the importance of economy on the farm but said it would not do to cut down the amount of fertilizers used, or curtail labor so that you cannot work the crops properly. The only plan he could see by which farmers can economize is to spend less and reduce their family expenses.

Geo. E. Silver said that to be successful a farmer must have order and system in his business; he must give close personal attention to his work; he must be thoroughly acquainted with his farm and endeavor to ascertain what fertilizers act best on the different fields. He was satisfied that there has been a great waste in the fertilizers from lack of this knowledge. Farmers ought to keep accurate accounts and know what crops yield a profit and what do not.

Without this they cannot tell where to trench. He thought there might be improvement in the manner of planting, the mode of cultivation and the selection of seed. Farmers, too, ought to employ only the best labor, which is always the cheapest. Laborers on farms have themselves to blame for the low wages they receive. If they gave more attention to their employment, became experienced, capable, they would receive higher wages. The demand for first-class labor is in excess of the supply. There is also economy in keeping good stock of all kinds. If an animal will not thrive, get rid of it at once. Only first-class and the most improved implements should be used. It is true on a small farm a man can not afford to lay out much money on expensive implements, but on a large farm it pays to have them, and the farmer should take care of them. We should not plant more than we can cultivate well. If we can by a little extra work make an acre yield 15 barrels of corn instead of 10, it would be economy to plant a fewer number of acres. The profit would be greater. There is no crop we can cultivate or no branch of farming, which will yield large returns at the present low prices, but in a mixed system of farming, by close attention and strict economy, we can count up some profit at the end of the season. When crops are ready for market that is the time to sell. One year with another the farmer will realize more profit that way than by holding his crops.

Wm. D. Lee said farmers must study economy in these times. There is some consolation in the fact that although we can't get much for products nearly everything we have to buy is very cheap. There is great economy in raising our own farm stock. Farmers should not get discouraged but should bear a steady hand and keep straight along, one year after another.

Wm. Webster said it would not do to stint the land in fertilizer and it is false economy to stint your children in their education for the sake of having their help on the farm. To economize we should watch the little things. A stitch in time saves nine. There may be a little wash in a field. A small furrow or a wheel-barrow load of manure might stop it and save a hundred dollars. He would not advise farmers to curtail their fertilizers, labor, stock

or machinery. It would do better to apply the same amount to less land.

Wm. B. Hopkins said that every farmer should give close attention to his farm. Every acre should be made to produce all it can. Farmers have many imaginary wants. They should spend money only for what is absolutely needed on their farms or in their families.

John Moores said that he had been practicing economy a good while and had got at the root of it. With others he thought very close attention must be given to business. He did not believe farmers live extravagantly, but they may keep too many horses and fine carriages. While it will do to curtail our fertilizers, it is important to know what are fertilizers. No two members of the club use the same kind, and we might buy phosphates that are not fertilizers. If we could decide upon what are valuable fertilizers, instead of buying 10 tons we might join together and buy 1,000 or 5,000 tons at reduced prices. If a farmer has little or no money, he would not advise putting much commercial fertilizer on his corn crop. It is important for farmers to keep a record of their business.

Rev. C. D. Wilson said the trouble seemed to be that farmers in Maryland expect to live like princes and save money in hard times without retrenching. It is a forlorn hope, however, to get people here to live as they do elsewhere. The only economy he could suggest, and it is the one first resorted to in hard times, is to reduce the preacher's salary, and don't pay your doctor, or for your county paper.

Dr. W. W. Hopkins said that as a general thing farmers do practice economy and are not able to practice much more. Mr. Silver had described a painstaking, industrious, economical farmer, and if his plan were followed a man would be successful.

James Lee thought farmers do economize and are reasonably successful. The members of this club are holding their own in these dull times. He did not see how they could practice any more economy than they are already doing.

Hon. Joseph B. Seth said that economy is easily preached but hard to practice. — A proper economy in any business is judicious expenditure of labor and means. If we see a man's buildings in order, his stock and implements in good condition, we say

he is spending money, you find that he is the successful farmer. True economy is to do well whatever you do; the stock you feed, feed it well, but feed judiciously. When the produce of an acre don't pay the cost of cultivating it, let it alone. You had better decrease the amount of land cultivated than the fertilizer used and by giving increased attention you will find more profit. Mr. Seth also said he believed in high cultivation. Exercise proper care, put everything in good order and keep it so, be alive to the interest of the farm and watch all leaks. If a man gets careless about these things he will go behind.

S. M. Lee said he didn't endorse the remarks that we are going through hard times. With improved machinery grain can be made at one-half the cost that it could when he commenced farming. He had seen times when farmers got along at rather lower prices than now. Hard times belong rather to individuals than to the community. When business is brisk we spend more money than we should. We don't lay aside something to go down hill with. When produce is selling low he would not advise farmers to buy more than they can help. A man may throw away money on labor-saving implements, but if he shuts down on all expenditures he may throw away more. The great point is to bear a steady hand, and if you have a little money make it go as far as you can.

Benj. Silver, Jr., the President, said that times of elevation and depression are periodical, and the trouble is, in flush times we acquire extravagant habits which are hard to get rid of. It is false economy to stint land and let it or our fences run down, but hold a steady hand so as to be able to take advantage of the change of the tide when it comes.

FARMS OF CARROLL CO.

We have been much interested in the sketches in the Westminster Democratic Advocate of the Farms of Carroll Co. The writer makes his subjects both entertaining and useful. He goes back to their early settlement and intersperses his accounts with pleasant reflections, and deduces from existing facts important lessons for his Farmer friends. By the way the Advocate in all its departments shows enterprise and talent.

RURAL ADORNMENT.

We must give credit to the Professor of Horticulture and Landscape-Gardening of the Michigan Agricultural College, for the following timely and sensible remarks, in the opening paragraph of his Bulletin on the above subject. They give the substance of our own ideas, which we have had occasion to print in past numbers of the Maryland Farmer:

The adornment of rural homes should be considered a necessity rather than a luxury. As the country becomes older and natural windbreaks are destroyed, it is imperative that we plant for protection. The attraction of farm life for our sons and daughters is largely determined by the character of the arrangement and exterior adornment of the home farm premises. But it should be remembered that the beauty of a home does not depend so much upon the number and variety of species of plants as upon the taste of the planter. The elements of attraction in landscape gardening are comparatively few and simple. A tasty and thoughtful disposition of a half dozen kinds of trees and shrubs is far preferable to a thoughtless mixing of twenty more beautiful kinds. So far as practicable trees and shrubs should be planted in groups, especially at some distance from the house. In this way a greater variety is secured. These groups should be so disposed as to hide from the common points of view, especially from the windows of the residence, all undesirable objects and to afford glimpses of all attractive objects and landscapes. It is a serious mistake to pack the front yard full of bushes and flowers.

To the Editor of the Maryland Farmer.

GROWING EARLY CABBAGE

This may be accomplished in two ways, by sowing the seed in the Fall about the first of October, and transplanting to the open ground, or cold frame, on the approach of cold weather. The plan pursued by those who follow the first method; is to ridge up ground with the plow in four foot rows, some running them north and

south, and planting on the east side of the list; others running them east and west, and planting upon the north side. Advantages are claimed for each method, which is governed mostly by the kind of winter passed through. At Norfolk, and other places beyond the reach of extremely cold weather, it is the universal custom to plant upon the south side, so as to obtain as much growth through the winter and early spring as possible. Plants wintered in cold frames may be planted quite thickly in the frames, and require but little protection besides the glass, they have the advantage over Fall set plants of being less liable to winter kill; and hot bed plants in being tougher and ready to set out earlier in spring. Plants raised in hot beds require the seed to be sown the early part of February, and if properly hardened off can be transplanted to the open ground latter part of March. This hardening is all important, in order to secure them against spring frost, which often kills the young and tender plants when first set out. One trouble in growing plants in hot beds is keeping them low and stocky as they are apt to run up spindling.

In planting out in open ground, see to it that the plants are put sufficiently deep, so that none of the stalk will be exposed to the frost, set in this way both in fall and spring, but little danger from frost need be apprehended. I am convinced that the ground for cabbages can hardly be made too rich, heavy manuring admits of the heads being grown closer together. Manures may consist of either barnyard manure, compost, or fertilizers; the latter applied heavily on good soil will produce fine crops alone. Cultivation can hardly be too frequent, once a week is none too often, I find the Early Jersey Wakefield the best early cabbage, next following is Henderson's Summer, Extra Early flat Dutch, and Fottlers Brunswick; following in season in the order named. If planted out last of March the first two may be harvested during the early part of July, the other a few days later on.

ARUNDEL.

Tongue, after it has been boiled, cut into thick slices, and stewed in a rich, brown gravy, makes a very nice corner-dish.

GARDEN HINTS.

An experience of more than a quarter of a century in garden management has taught me some things which I should have found it profitable to have known as a beginner, and in the hope of helping others I will refer to some points of importance.

All quick maturing crops require much richer soil and better cultivation than those that are longer in maturing. Late Peas, like Champion of England, or Marrowfat, will yield a profitable crop on moderately rich land without manure, but the kinds that mature early in May must be furnished an abundance of plant food in such a form as to be at once available. The same is true of most, if not all crops; the shorter the time in which they mature, the better chance they should have.

In all crops that come up thick and require to be thinned, every day's neglect after the plants are large enough to be thinned, reduces the yield of the crop. Beets, Carrots, Radishes, Lettuce, Parsnips, and all such crops, should be thinned as soon as you can get hold of them with thumb and finger. In planting early Potatoes some days may be gained by cutting the seed and spreading it in a warm room until it callouses and the buds begin to start. And to avoid danger of freezing the seed should be crowded down into the bottom of the furrow by stepping on it, and covered with two inches of partly rotted manure before the earth is put on. Planted in this way mercury may fall 10° for a single night without injuring them.— W. F. B., in *Vick's Magazine* for March.

Courtesy Toward Our Own Household.

One thing do remember, to have your home, every-day table, just as attractive as the one to which you invite your honored guest. It pays to exert one's self for one's family. They never lose sight of it. Ten to one if the honored guest, tired with social courtesies will not forget you in a day or only remember your little affair as a debt to be paid back some time. We do not under-estimate the duty of hospitality, but we do think we are more likely to

err in the lack of the courtesy toward our own households. Be hospitable to them, we pray, for thereby some may entertain angels unawares.

CORN AND COB MEAL FOR HORSES.

Well ground corn and cob meal is better adapted to feed work horses than meal without the cob, for the cob gives bulk in the stomach, and thus assists digestion. But, although ground with the cob, corn meal should never be fed alone to horses. The horse masticates its food but once, and many horses do not masticate it even once. The writer at one time fed two working teams upon cob meal, as their grain food for two years, and they were well and ready for work. I was quite aware of the defect in corn as a muscle-forming food, and remedied this by giving nicely cured clover hay with it. This assisted in balancing the ration: but the essential point was in feeding the corn and cob meal (sixteen pounds) upon twelve pounds of short cut clover hay. The hay was moistened and the meal mixed with it, and lay in a mass about twelve hours before feeding. This effectually prevents any ill-effects from the dust of clover to the lungs of horses. This mixture also caused the meal to be well digested, and prevented all tendency to produce fever in the stomach. These teams had constant work, but were always moved on a moderate walk. Corn meal, at that time, was the most economical food, which was the sole reason for adhering to it. The horses were kept till twenty years old, and were never in better health than during these two years.

Captain William H. Parker, just confirmed as U. S. Minister to the Kingdom of Corea. In 1874, he was elected President of the Maryland Agricultural College, and remained at the head of that institution until 1884. when he resigned his office. After vacating the college presidency, he devoted his attention to literary pursuits.

To the Editor of the Maryland Farmer.

MANTUA FARM, ON COAN RIVER.

Your communication of April 9th requesting information respecting the Farmer's prospects in this locality for the present year is at hand. Grass and clover where cultivated is looking very well; wheat where the land was properly prepared before seeding, and rolled immediately after seeding is looking *remarkably* well, this is the case invariably on both *heavy* and light soil. I have one neighbor who failed to roll after seeding and his wheat was much winter killed and is the poorest looking of any in the neighborhood, although he used a fertilizer that cost more than double the price of that which was used on my land. Fruit trees are blooming with us and indicate a very healthy appearance. In looking through my orchard of several thousand trees I have not found an injured bud; the prospects so far as crops are concerned is encouraging to the farmer. The protracted heavy rain during the early part of the month has retarded the planting of corn somewhat, but as the weather is now favorable for finishing the preparation of the seed bed, there need be no loss incurred from the delay; oats are planted and are doing well, the weather having been particularly favorable for their growth. We have peas and early garden stuff growing nicely. A heavy thunder and rain storm the first of the season visited us last evening about six o'clock and lasted some thirty minutes, but this morning is bright and beautiful growing weather, temperature, 87° in the sun.

I beg you and your readers to excuse me for reverting to the use of the roller again so soon after my several articles, published in your journal within a short time, in which the roller occupied rather a conspicuous part. I have not roller on the brain, nor do I wish to be considered as riding a hobby, but as you are so courteous as to open the pages of your journal to the practical farmer (and I have filled that position for many years,) I am disposed to have my views as such understood if possible. In your April No. of the MARYLAND FARMER, commencing on page 118, I have before me an article, the title of which is "The Roller,"—the author, Mr. John M.

Stahl. I do not wish a controversy with Mr. Stahl, but his views respecting the use of both harrow and roller upon clay soil would lead me astray if my experience had not taught me the practical use of these two most valuable implements. I have farmed as you are personally aware Mr. Editor, in both Maryland and Virginia. I commenced using the roller on the Cowpens farm, Baltimore county, in 1854. This farm is a strong lime-stone soil, it was only by the repeated use of roller and harrow after thorough plowing that I found it possible to reduce the seed bed to a proper degree of fineness to receive the seed, and in every instance the roller was the last implement used in advance of the wheat drill in completing the preparation for seeding, and invariably used immediately thereafter for the purpose of making the surface as compact as that portion of the seed bed under the wheat. This plan gave me uniformly eight bushels of wheat per acre in excess of what my neighbor realized, who treated his land (which was of the same degree of fertility) in every particular the same, in the way of preparation for seeding, but would not roll after the drill. This was my experience for three successive years on a strong clay farm, the clods where the land became very dry before plowing, turning up almost like rock and I have had to break many of them with hammers. The uniform crop of wheat exceeded thirty bushels per acre, and I am sure if the straw had been strong enough to have supported a fully developed head, the yield would have been half as much again, but the wheat lodged and of course was not fully developed. My crop of oats on this farm exceeded eighty bus. per acre, land rolled after seeding. I will take the liberty of quoting Ex-Gov. Hamilton, of your State, (than whom—although a lawyer—there is hardly a more successful farmer either in or out of Maryland.) He stated at the Farmers' Convention in Baltimore over a year since, when the question arose respecting the difficulty the Eastern farmer had to contend with on account of the large and cheap crops of wheat made in the West. That the Eastern farmer could more than compete with the West by resorting to improved methods of cultivation, that his neighbor raised sixty bus. of wheat per acre, and that he

harrowed his land *fourteen times*, this I believe from my knowledge of Washington county lands is a clay soil. I will say right here that the ordinary straight tooth harrow does compact the soil if used frequently enough, but *does not bake it*. The teeth presses the soil immediately under them more compact, but the soil drawn up by the teeth passing through it, and left loose and porous acts as a mulch, preventing the sun from reaching that portion immediately under the surface and consequently keeping it moist and friable.

I have found the harrow the most useful implement of any I know of for drying out the soil after heavy packing rain, particularly the spring-tooth harrow. Of course, no implement should be used upon land when too wet. Mr. Stahl experienced very unsatisfactory results from rolling his land in advance of planting his corn. Here (if I may be permitted to say so) was where his mistake occurred. If he had prepared his corn land thoroughly by harrowing before planting, and then rolled *after* planting, his experience would have been more satisfactory, the rain coming and packing the soil on the corn would have made but little difference. The smoothing or straight-tooth harrow run over the entire surface as soon as dry enough would have produced results, on account of the roller having been used, that could not have been realized if the rolling had been omitted. It is impossible to make the soil as fine without the use of the roller as with it, and as it is only the fine soil that is soluble, it is of greatest importance to have it pulverized as thoroughly as possible for all crops. My experience has been, and is, that stiff clay and all varieties of clay soil require more harrowing and rolling to put them in proper mechanical condition than light or loamy soils. I have no land on my farm that does not settle too firmly for a crop to be planted if a heavy rain falls just after I have finished preparing the seed bed, and whether rolled or not, I have often had to use the spring-tooth harrow to loosen the surface sufficiently to enable the drill holes to cover the seed, but in this operation I do not think any loss is incurred, as it only produces a more perfect seed bed. While owing to the difference in condition of moisture and temper-

ature in the spring of the year, as compared with the fall, the roller may be used less frequently in preparing the land, but I regard it as very important to have it used after planting every crop, because of the insuring of more prompt germination of the seed, and leaving the surface of the land in much better condition for future operations. As to being careful about the condition of the land when the roller is used, *no land of any kind*—I ever saw—*should be rolled when wet*; but if rolled when in proper condition, I have never seen any implement equal to it in efficiency for completing a seed bed on *any kind of soil*.

Very respectfully,
Heathesville, Va. T. R. CRANE.

DESTRUCTION OF OUR NATIVE BIRDS.

We have received Bulletin No. 1, of the American Ornithologists Union. We cannot but deplore the wanton destruction of Song birds and those birds which may be called by us insect exterminators. The attention of ladies is particularly called to the myriads which are killed, that they may be worn by them as ornaments in various forms, and they are urged to repudiate all hat trimmings and decorations of which they form a part. We join heartily in the wish that some general law may be devised to prevent the slaughter of our native birds.

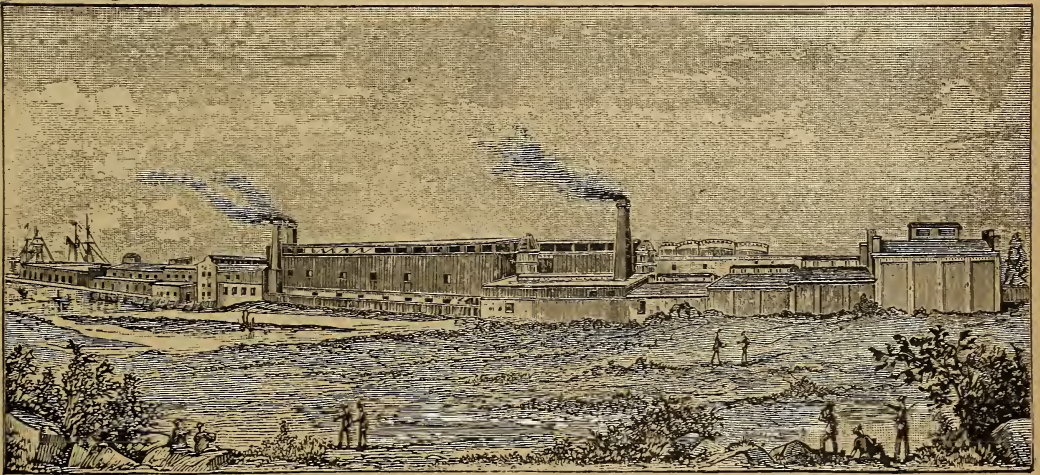
FOR THE HORSE.

It is not perhaps generally known that one of the best kinds of food for horses is raw potatoes. For a horse, thin in flesh, nothing will better recuperate and fatten him. Cut the potatoes, and roll them in a mixture of bran and cornmeal, and the effect will be magical almost. The comb and brush will speedily bring on him a glossy coat, and he will improve in spirit and life as well as in flesh. About a peck of potatoes can be fed each day in this way to great advantage, and with no evil effect. They surpass every other root in their good influence upon horses.

CHEMICAL AND PHOSPHATE WORKS.

Among the enterprises of Baltimore perhaps none are more extensive nor better known, than this manufacturer of Fertilizers. Our lands are now in that condition where manufactured fertilizers are a great help in the immediate production of paying crops. We give on this page an illustration of the extensive works of Slingluff & Co., one of the most enterprising firms in this department. They are known as the Chesapeake Chemical and Phosphate works, and are well worth a visit from those interested in agricultur-

tensive mills also are in operation there for grinding the crude goods. The whole process is carried forward on these premises, so that the visitor can comprehend the entire work of manufacture. In addition to all this he can also see the method of distribution to all parts of the country. A switch of the Baltimore and Ohio railroad on their property, with cars loaded or loading, or ready to start, gives one method; while vessels at the wharf of the company receiving goods give an idea of many tons going away by water conveyance. Slingluff & Co. certainly deserve great credit for the perfection of their works, and the



al pursuits. They are located on the "Spring Gardens" at the foot of Leaden-hall street and cover about three acres of land. They are the scene of a busy crowd of workman, comprising from 80 to 100 men, of all grades, from the most skillful chemists to the common laborer. Science, skill, and chemical knowledge are especially required by them, because they themselves manufacture the chemicals used in the manipulation of their fertilizers. All the sulphuric acid used in the preparation of their super phosphate is made on their own grounds, which cannot be said in reference to many others in this line. Ex-

skill with which they are thus enabled to supply a good and reliable article of fertilizer upon which the farmers may rely.

Such manufactures are one of the great needs of Baltimore. In various ways our city has been striving for a long time to encourage manufacturers to make their home with us, and give to us the benefits of labor employed and capital expended in our midst. The citizens of Maryland should show by their patronage of such firms as Slingluff & Co. that they are in hearty sympathy with the efforts of Baltimore to induce men of means to employ their money in enterprises within our

State. In preference to sending abroad for what they need, let them see if just as good an article can not be had at home; and if it can, then let the home production have their first consideration. We are too ready to suppose that what comes from a distance is of a superior character; but this is very seldom the case. In fertilizers the home manufacturers often excel.

THE SUCCESSFUL BREEDER.

SOME ESSENTIAL POINTS OF HIS CHARACTER.

It is said that "the man who establishes himself as a breeder of any class or kind of pure bred stock, at once assumes more responsibilities than is generally found in a superficial examination of such a position. In him centres not only the success of the individual enterprise, but also the reputation of the entire field which he enters, and is affected to a greater or less extent by his integrity, honesty, and general manner of doing business. Egoism is always ready and anxious to rejoice over the failure of one who has broken from its ranks, and because such failures sometimes do occur those who have taken the initial step in the right direction should, with more care, guard against anything that has even the semblance of failure. Untiring perseverance alone is no assurance of success when the merit of an enterprise is measured by public opinion, and is in a great measure dependent upon the general public for support. To produce stock for the market should not be the entire object of a breeder, when the value of his animals depends so much upon the many different things connected with their production. It is not difficult to see why the value of an animal is often changed by the transfer of ownership. It is well for beginners in such a laudable work as the improvement of live stock to study these points well, and to remember that the character of the stock depends in no small degree upon the character of the breeder."—*Exchange*.

THE best animal, valued for its flesh, milk or wool, is the one that produces most and best from a certain amount of food.

The Use of Commercial Fertilizers.

Every year farmers should enquire if it will pay to use commercial fertilizers. The question is always pertinent, and few exceptions can always receive the same answer. Unless there is an abundance of manure to fully meet the wants of all crops from the time the seed is sown until the plant is matured, it will pay to use fertilizers. Plenty of good and properly prepared food is needed to make plants do their best.

If this cannot be supplied by the manure made on the farm, it will pay to purchase first-class fertilizers. In this respect we desire to call the attention of farmers and planters to the productions of the Fertilizer manufacturers, Messrs. R. J. Baker & Co. These gentlemen are manufacturers of Stag Super-Phosphate for Tobacco, Ammoniated Bone Super Phosphate for all crops, Pure Fine Ground Raw Bone, Dissolved South Carolina Bone Phosphate, High Grade Imported Bird Guano, Bird Guano Potash, etc., all of which have given universal satisfaction. Messrs. Baker & Co., also make a specialty of compounding special formula to order. This is a representative house in the above line of trade, in which the utmost confidence can be placed.

Something To Think About.

Farmers should remember that their sons, when they leave the parental roof will as a general thing have but little money with which to commence. Their capital should therefore be a knowledge of every part of their practical farm life. The father should make it a part of his duty to see that each son is trained in his profession and understands the entire round of business connected with farming. He should be conversant with all; from the first breaking of the ground to the marketing of the crop; and the proper care of the proceeds received for it. This covers a broad field of the best education that any mortal is capable of receiving, and every farmer should give this to his children.

AGRICULTURAL CLUBS.

We have earnestly advocated in the past the establishment (wherever it is practicable, even should it be in every school district) of an Agricultural Club, for mutual instruction and improvement, for the discussion of all the themes which most interest and benefit the farmer. We have urged Farmers' Meetings to be held as often as may be possible, for the interchange of ideas and the cultivation of those social qualities which add so much to the happiness of human life.

It is on this ground of social enjoyment and profit that we have advocated that the organization of these clubs be broad and liberal in the extreme, admitting all to equal fellowship who may wish to join, and who will conform to what few rules may be necessary for organization and order. On this account also, we have desired frequent public gatherings for discussion, for lectures, for comparison of ideas as to crops and markets, to which the entire public—husbands, wives and children—shall have a free invitation.

Believing as we do that these Agricultural Clubs will prove a blessing to the community, we not only feel to speak a word in their behalf, but we will show our interest in their establishment in a more practical way. To any member of a club, which shall be established after this date, during this year of 1886, we will send a year's subscription of the MARYLAND FARMER, on the receipt of (75) seventy-five cents.

It is often said that it is difficult to get subjects for discussion which will be of general interest. We add in this connection a series of subjects from which a choice may be made whenever any need is felt in this direction:

Farm Fencing.—Where are Fences needed, and what shall they be made of?

Rotation of Crops.—What Crops should not follow other Crops?

The cultivation of Grass.—Best Methods of keeping Mowing lands Productive. Management of Pastures.

Cattle Feeding.—What Foods are most Economical, and how should they be fed?

Swine Breeding and Pork Making.—Best Breeds and Best Methods of Feeding.

Sheep Husbandry.—Breeds and General Management.

Sheep Husbandry as compared with Cattle Husbandry.

Poultry as a source of Farm Income.—What Breeds to Select, and how to Care for the Birds so as to make their Keeping most Profitable.

The Growing and Harvesting of Indian Corn.

Producing, Saving and Applying Manures.

Root Crops for Stock, or for Market; Varieties and Methods of Culture.

Cleaning up Waste Land. Removing Stumps and Stones.

Silos and Ensilage.

Our Weed Pests.—How best to Destroy or Exterminate Weeds.

Best Methods of Butter-Making.

Keeping Fruit and Vegetables in winter for Home use and for Market.

Commercial Fertilizers.—To what Extent can they be Profitably applied?

Apples as a Farm Crop.—Should an Increased Product be Encouraged, or is there already an over supply?

Economy of Large Farms as compared with Small Ones.

Several successful clubs are in operation in this State at present and their proceedings show an exhaustless supply of the most useful and entertaining topics. The Deer Creek Club is a case in point as witness its proceedings in frequent Numbers of our Magazine.

GOOD PASTURES are the good farmer's main dependence, and he should bend every energy to make them luxuriant, rich and nutritious. They should be cared for and manured as well as are the grain fields.

EDITORIAL BRIEFS.

GET THE BEST SEEDS.

The best seed for the garden vegetables is none too good for you. It will cost but a trifle more than the common or poor, and it will in the outcome be so much better, that it will make your eyes brighten and your face shine with the pleasure it will give you. Do not be satisfied with anything inferior. Particularly if you get any flower seeds to please your wife or your children, let them be the very best. Their hearts will rejoice over them.

BEWARE WHAT YOU WRITE.

Again we warn the farmers not to write their names to any kind of a paper offered them by a stranger. No matter how innocent it may appear it may turn up with a note that will cause much trouble, and perhaps take the year's earnings with it.

LOOK TO YOUR FARM WAGON.

If your farm wagon is a good one, you can accomplish much more work than if it is in a rickety condition. If you keep its axles well greased you can load it heavier, and your horses will not murmur. Of all sounds, that of the complaining wheel on a dry axle is the most grating on one's feelings. It tells of a careless and neglectful man somewhere; either the farmer himself or the help he has hired. But the greatest injury is to the poor horses, who must do double labor because of the neglect. He has but little mercy towards the beast who fails to see that his farm wagon is in order.

THE INSECT PESTS.

Watch now for the eggs of insects, which before long will turn to caterpillars to infest your fruit trees; not only to the injury of the fruit, but destroying the beauty of your trees and disfiguring your home surroundings. A single leaf with its eggs, plucked and cast into the fire, or other-

wise carefully destroyed, will be a great gain during the summer. Do not allow any one on your farm to destroy the birds, for they are getting to be precious. They are among the very best friends of the farmer, and he can afford better to lose many a prized luxury than these bright little songsters, that beautify his home and preserve his crops from their worst enemies.

NOT TOO MANY ACRES.

The season for work is upon us. But of one thing be mindful: do not attempt to do more than your strength or your help will enable you to do well. If you try to cultivate more acres than you can keep clean, than you can fertilize thoroughly, than you can harvest to advantage, you will surely miss the success you are seeking. Better have less acres under the plow than to be forced to neglect the half of it.

BORROWERS.

In every community there are some who are always borrowing. It is so much handier to borrow than to buy. Have a standing rule that it is inconvenient to loan tools and implements in the spring. If it is absolutely necessary to loan, then be sure and know when they will be returned; and if they do not come promptly, send for them. If the party would borrow again, remember that you cannot afford to loan your implements, and then be obliged to send for them when you need them.

WEEDS.

The season is commencing. Let every farmer resolve that he will give no quarter this year to weeds. Commence early, hold a steady hand, and finish up late in the autumn, so that the frost will do the work of destruction. Clean them out of every corner, leaving no neglected spot. Keeping the crops clean is not enough. When the season ends have the farm free from the pest of weeds.

MAKING SOILS WARMER.

Market gardeners and others who are troubled with cold and backward soils in spring may do a great deal sometimes by mere mechanical contrivances to warm and fructify their lands. The first essential thing, of course, here as everywhere else in farming, is to effect good and thorough drainage. This topic has been so much and so ably discussed that nothing remains to be said about it.

Next to good drainage, perhaps, is depth of mellow soil. This drainage helps to effect and plowing or spading must do the rest. A soil, however, may be increased in depth by spreading rich earth, woods scrapings and vegetable matter upon the surface. A dressing of an inch or more might well be applied to thin soils every season and this would do much not only to promote fertility, but to increase the temperature of the ground. Constant stirring of the soil by plow and cultivator likewise makes the depth a little more, as a cubic foot of compact earth is increased about one-third in bulk by breaking it up. Cultivation, however, as it exposes the vegetable matter in the soil to oxidation, tends in the end to reduce its depth.

Dark-colored vegetable matter is of great service in the composition of cold soils, besides adding fertility tending to increased warmth by absorption of the sun's rays. Dark soils are warmer than gray or white, and all vegetable refuse about the farm that can be composted should be used to make black and warm the soil.

One of the best articles that market-gardeners who employ fertilizers largely could use is charcoal dust or the fine and broken coal that results from the burning and breaking up of the coal-kilns. Soils to which this is pretty liberally applied are not only made warmer, but they are *made proof against leaching* and hence there is no loss of fertilizing material by

the process of drainage. If surface washing is prevented and every drop of water that falls on the soil is made to flow through it, there is not only no loss of any fertilizer applied to the land, but the fertilizing elements of the air brought down by the air are seized upon and arrested by the charcoal dust and held in store, ready for the feeders of the plants. This important office charcoal will perform effectually and thoroughly, if only a little of it is present in the soil. A very thin layer, one-fourth of an inch, say scattered broadcast evenly over the field will discharge its tripple duty for an indefinite time, for it does not decay. Only keep it from being carried off by mechanical means, and the charcoal will remain to duty for a half century.

It would pay any gardener or trucker to make one such application of charcoal. It prevents loss of manure on even the lightest sand; it gathers fertility from the rain and the air, and it warms the soil by absorbing the sun's rays. Could you ask more of it? Make the soil warm by applying dark-colored matter and charcoal.

MILLET.

Millet may be sown any time after both nights and days have become warm, and up till the middle of July; but when it is to be made into hay the best time to sow is early in June. It grows luxuriantly and very rapidly and may be sown after an early crop has been removed from the ground, or when it is seen that the pastures or meadows will be short. It is because of this chiefly that it is to be commended to the attention of farmers and is entitled to more favor than it has yet received; for I would not recommend that it be used where the clovers and perennial grasses can be as well grown. Yet all varieties of millet are highly nutritious and are relished by stock. They have a higher albuminoid ratio than has timothy, hence

are better adapted to feeding to growing animals, or in connection with corn.

It is difficult to get a proper stand of millet, if seeding is delayed until the hot, dry season, and it is very important to have a good stand, for if the millet is sparse it will grow coarse and likely be mixed with weeds. It is best to roll the ground down as it is plowed. Then harrow it fine, sow at once and cover with a harrow. If for pasture or hay, sow from three pecks to one bushel of seed per acre; if for seed, one-half of this amount. Sow after a rain, rather than before it, especially if the land is inclined to be clayey, for after a rain will form a crust that the young plants will not penetrate. The most favorable time for sowing is as soon after a rain as the harrow can be used.

In the extreme South the most popular variety is the Egyptian or Pearl millet, and it is likely the best variety adapted to this section. If cut when young it will produce a second crop. It does not mature its seed in the North. It will attain full size for cutting up to the fortieth parallel. German millet does well in this section and yields more than the common millet.

THE EXPERIMENTAL STATION BILL.

In conversation with many representative farmers from different parts of our State during the past few weeks, we are much pleased to know that the farmers of Maryland are more than gratified at our course in regard to the proposed Experimental Station at Pikesville, as published in the April number of the *MARYLAND FARMER*. And, also, that by exposing the machinations of a few individuals we saved to the State \$20,000 for this year and the sum of \$10,000 annually for an indefinite series of years to come. We do not claim for ourselves anything more than that we did our duty as a public organ for the

farmers of Maryland; and we will always be found ready to do this in the future, as in the past, without fear or favor. This movement for an Experimental Station is fully exposed in our April number, and also the cause of its merited failure.

It is unfortunate, however, that a scheme which originated in the personal unfriendliness of a few should have enlisted the sympathy of any good man in the State who never intended to do the college injustice; and it is gratifying to observe that legislative discussion and investigation which the college demanded and received is making fast friends of all classes.

It is a well established fact that if we can afford to wait public opinion is sure to do justice in due time; and now the Agricultural College, which has been so long misrepresented, has become during this winter's discussion of a location for an Experimental Station much better known and understood. The animus of all its past and present abuse has become recognized, and the College has more friends in the State to-day, and more earnest advocates, than it could ever have numbered before. The advantages of such an institution are more clearly seen, and we are confident that had time been given the Legislature to have examined and thoroughly weighed the matter, they would have cheerfully appropriated all that the College needs to carry out the great work for which it was originally established.

The farmers have needed an Experimental Station on a liberal scale, and all the facilities for such a station are at the College. We are heartily in favor of having such a station established, and shall rejoice to see it in successful operation.

THE science of feeding has been reduced of late years to a system which every farmer should make it his business to study, and conform his practice to the same.

CORRESPONDENCE.

We give some very important communications from different parts of our State in reference to the present outlook of crops.

We have received the following interesting letter from the Statistical Agent of the Agricultural Department for the State of Maryland:

E. Whitman, Esq., Editor of Maryland Farmer:

Dear Sir:—In reply to your note of enquiry of the 6th of April, I here state, from the best information I have from the several counties of this State, and by the best informed and judicious men of observation, I have come to the conclusion that the area in wheat this year is fully what it was in 1884, and if nothing happens the area to be reaped will far exceed that which was harvested in 1885. The condition of the present outlook for the year, on the 1st of April, is put at only 95 per cent., compared with a series of years past, owing to the severity of the winter and high winds, and little or no protection afforded by the snow. Yet as the weather and soil was peculiarly favorable to the wheat at time of seeding, enabling it to make good roots before the adverse weather, it is confidently thought our State will produce an immense yield the coming harvest, notwithstanding the present low price of grain, unless some unforeseen disaster intervenes. This is owing chiefly to improved culture, general intelligence of our people, aided by science and agricultural journals, &c., and more sensible systems in seeding this great grain, which has in a few years past raised the quantity in yield per acre from seven to thirteen bushels, with a correspondent ratio of a yearly increase of area sown. While on this subject let me say, as our lands have increased in fertility and our farmers have awakened to a just conception of their interest in the better preparation of the seed beds for this staple, much is saved by sowing less seed, so that now five pecks do better than formerly eight pecks per acre.

Respectfully,

B.

BEL AIR, MD., April 13, 1886.

E. Whitman, Esq.:

Dear Sir:—Replying to yours of April 9th, the wheat crop in Harford is looking well, especially that early sown, and gives prospect of an abundant yield. The grass seed sown last fall with the wheat looked well until the last two freezes, which killed much of it. Spring plowing has been backward, on account of the unfavorable weather, but is now going forward rapidly. The prospect for fruit is a good one at present. There seems to be considerable interest taken by our farmers in improved stock of horses and cattle. In addition to those at home, several fine stallions from a distance will stand in Harford this season. Among the improved cattle, I would mention a fine herd of Holsteins, lately purchased by Messrs. J. H. McCormick & Bro.

Yours truly, ALEX. M. FULFORD.

CHARLOTTESVILLE, VA., }
April 19, 1886. }

Editor Maryland Farmer:

The outlook for the crop of wheat in this part of Virginia is vastly better than last year, though hardly up to the average. Oats are looking well, and the abundant rains have given grass and clover a start which is very promising. Fruit thus far promises well; the critical time with us has not yet passed, but the present outlook is very favorable. Those who were or are so fortunate as to have had their off-year in 1885 with apple orchards may find a more satisfactory market in 1886. The writer is one who has that hope.

J. W. PORTER.

CHESTERTOWN, April 13, 1886.

Mr. E. Whitman:

Dear Sir:—Yours of 9th instant just received. I think our outlook at present is very flattering. Wheat is looking fine, better than for several years at this time of the year. Peach orchards promise a good crop just now, but there is still time to have the peach killed. I never calculate the peach crop until June. The late frost may come and kill them yet, but at present we have a good prospect. It is true that in some localities buds are very scarce, particularly on low lands and in bottoms,

but upon high lands buds are plentiful on the tops of the trees, but upon the lower limbs not so, but I think if we have nothing to kill them we will have a fair crop. Our country is now looking beautiful. We have had considerable rain, and the ground has been too wet to plow, very little plowing being done. Grasses are more forward this spring than usual. In some sections clover has not taken well, but where there is a good set it is looking finely. I have written hurriedly, and if what I have written will be of any use to you, you are welcome.

Yours respectfully,
S. VANNORT.

HARMAN'S, A. A. Co., Md., April 15, '86.
Ezra Whitman, Esq.:

Dear Sir:—Crop prospects in this section pretty fair, but little grain is grown in this immediate vicinity, trucking and fruit growing claiming most of the attention of our people. A larger acreage of peas and strawberries have been planted. Fruit prospects are for a half crop of peaches, a full crop of small fruits, apples, pears, cherries, &c. Notwithstanding the low prices realized for produce of different kinds of late years, the business continues to grow in extent.

Respectfully,

R. S. COLE.

FREDERICK COUNTY, }
April 12, 1886. }

Editor Maryland Farmer:

Dear Sir:—The prospect for a good yield of all crops grown in this vicinity is good. The fruit trees at this writing are in splendid condition; of course there can be no opinion formed as yet whether there will be a large crop, for the late frosts sometimes injure the buds along the river bottom, but not often in this immediate neighborhood. My crop as compared with the prospect of the spring of '85 is as 85 is to 60. The wheat fields in March looked as brown as a stubble, but now are a beautiful green. The ground is in fair condition for plowing, and our farmers are busy getting ready for corn planting. Will inform you later as to the condition of trees and small fruits. I remain,

Yours, &c.,

J. C. W.

WAKEFIELD, VA., April 17, 1886.

Hon. Ezra Whitman:

Dear Sir:—Our farming operations are backward, owing to the protracted rainy season. But little wheat has been seeded in this portion of tidewater Virginia since the war. The oat crop is looking well, and the outlook for fruit is very good. It will afford me pleasure to give you any information in my power.

Truly yours, M. J. HOLT.

BEL AIR, MD., April 13, 1886.

Ezra Whitman, Esq.:

Dear Sir:—The wheat crop in this neighborhood is in first-rate condition, and is so reported throughout the county. The occasional exceptions are where the seeding was unusually late.

Yours truly, H. D. F.

THE PEANUT CROP.

Perhaps some of the readers of the MARYLAND FARMER have been thinking of trying this, to them, new crop. A few suggestions, the result of some twenty years' experience in the Virginia peanut belt may be of some service to them.

When to plant. From the first to the last of May is the preferred time in Virginia, and the same would suit well for the latitude of Maryland. The earliest land, that is, the dryest and warmest is planted before the 10th; colder and heavier soils sometimes not before the 10th of June. Some seasons the James river lands are planted the last week in April. The seasons, if cold and wet, and the pressure of farm work, often delays the planter two or three weeks. Good crops are sometimes made even when planted the first week in June.

How to plant. The land is fallowed about the same time with corn land, a little later preferred, and at the time for planting, the rows are marked off the same time as for corn at the proper distance, ranging from two and a half to three feet, according to choice, quality of land, &c., and if any fertilizer is used, it is then scattered by hand along the drill, small ridges are then made over the drill by lapping two furrows with a turn plow. The rows are then made flat with a simple implement

drawn by a horse; the marker, another Virginia implement follows, making the little depressions where the pea is to be planted. The kernels are dropped, one in each depression and covered by the foot. Care is taken not to get the seed covered too deep, an inch to an inch and a half of soil above it being about the proper thing. The process is simple, easy and pleasant enough. The distance between the plants is made to vary from fourteen to twenty inches. A bushel of good peanuts (in the hull—22 pounds) will plant an acre, but we count a bushel and a half, allowing for assorting and some for re-planting.

The cultivation. This is simple enough. Any method that keeps the grass away from the plant and the soil about it mellow meets every requirement. Usually we plow the first time with small turn plow, throwing the soil away as we do in corn, and the hoes follow chopping away the grass and loosening the soil. After this the cultivator may be used through the remainder of the season. We give three hoe weedings and four or five plowings and usually lay by the middle or last of July. The crop remains untouched then 'till digging time in October.

The seed. Great care is used in securing good seed. At this date the novice must take the risk and plant what he can get. The bulk of the peanuts in market will germinate nearly as well as any. One can tell by its appearance if a seed will grow. If you think of trying an acre, don't plant many the first year; procure some 30 or 35 pounds of the fairest looking peanuts you can find and proceed to plant them now without delay. As a crop the peanut still pays about as well as other things, despite the low price. It has its uses besides the marketable staple.

Va.

B. W. JONES.

[Ed.—At the Meeting of the American Agricultural Association in New York, we listened to the remarks of Dr. Holt, of Virginia, on this subject with a great deal of interest. Dr. Holt is largely engaged in the growing of peanuts, and no man is better posted than he is as to its extent and value. We remember that one of his statements was a surprise to us: that peanuts were a more important factor than

cotton at the shipping point at Norfolk, and brought in a larger amount of profit to those who handled the crop. We mention this as an illustration of the value of the above letter, and we suggest that our Maryland Farmers should examine into this matter. The light soils of some of our Counties on both the Eastern and Western shores are splendidly adapted to the growth of this crop.]

MARYLAND LANDS AND A MILD CLIMATE.

The great wonder is, why do our people living in the North and East, when they leave home, go to the Far West? Have we not a soil as productive, especially when we take into consideration the great variety of crops to which our lands are adapted; while our climate, especially on the Eastern Shore, is the most delightful, and free from the piercing storms and destructive hurricanes to which the coast and higher latitudes are subject? We have in Maryland more than one hundred thousand acres of unimproved land, now lying idle, which is susceptible of the highest state of improvement. The lands in the upper part of the State have for many years received favorable consideration, being contiguous to railroad and steamboat transportation, while the lands in Southern Maryland, both on the Eastern and Western Shores, have not been so highly favored. And it is in these two sections of the State where land is more abundant and cheaper, for it was in this part of the State that slavery prevailed more generally before the war. Consequently the farms are large, and difficult to manage with the present system of labor, especially in the oyster and fishing localities. Now these lands are largely in the market, and can be bought very cheap, in the counties of Wicomico, Worcester and Somerset, and especially in Wicomico. Large farms are

for sale, which can be bought at a price which would surprise persons living in the more densely populated sections of the North. Good lands, which will produce under favorable tillage fifty bushels of corn and twenty-five bushels of wheat or oats per acre, and is the best of peach land, and all manner of small fruits grow as by magic. These lands can be bought at \$15 to \$25 per acre, according to location and other advantages.

We often wonder that capitalists do not see the future advantages which must at an early day inure to Southern Maryland and the lower Eastern Shore, and make investments in that direction, inasmuch as the growth of the timber on the lands at the prices for which they can be bought will pay ten per cent. on the amount invested.

We have from time to time called the attention of our readers to the great advantage of this section of the country for the settlement of those enterprising farmers who would give a little labor towards a coveted success. In once more mentioning the subject in reference to the Eastern Shore, we take the liberty of referring our readers to Col. Lemuel Malone, of Salisbury, Md., who will willingly answer all communications, and give specific information as to individual farms and parcels of land.

TESTS OF DAIRY COWS.

We have received a very long printed article from the Holstein Friesian Association of America on the above subject, with a request for its publication. It is from the pen of E. A. Powell, of Syracuse, N. Y., and is interesting to the dairy interests of the country. We have not the room in our magazine for the article, but should any of our readers desire to see it, they can doubtless secure a copy by addressing Thomas B. Wales, Jr., Iowa City, Iowa, who is Secretary of the Association.

A BILL

Entitled An Act to Regulate the Inspection and Sale of Commercial Fertilizers in the State of Maryland.

Sec. 1. Be it enacted by the General Assembly of Maryland; That every package of Commercial Fertilizer sold, offered or exposed for sale for manurial purposes within this State, shall have plainly stamped thereon the name of the manufacturer, the place of manufacture, the net weight of its contents and an analysis stating the per centum contained therein of nitrogen or its equivalent in ammonia in an available form, of potash soluble in water, of available phosphoric acid, of moisture and the materials from which said nitrogen or its equivalent in ammonia, phosphoric acid and potash are derived, with an allowance of not more than 2 per centum variation in the amount of ammonia, 3 per centum of the amount of phosphoric acid and 1 per centum of the amount of potash.

Sec. 2. And be it enacted; That every manufacturer, importer or dealer in Commercial Fertilizers, shall, before selling or offering to sell any Commercial Fertilizer within this State, take out a license for the sale of fertilizers, which license shall be rated upon the amount contemplated to be sold, as follows: for one hundred tons or less, Five Dollars, for every additional one hundred tons or part thereof, Two Dollars additional, provided that no license shall be charged upon lots ordered by farmers to be made after their own formula for their own use. Said license shall be prepared and furnished by the Comptroller of the Treasury, and to be issued from the first day of May to the first day of November in each year, and to be good until the succeeding first day of May, provided that when any manufacturer in this State shall have taken out a license as herein provided, it shall not be necessary for any person to take out a license to sell the fertilizer manufactured by the manufacturer who has taken out such license, and provided further, that if any person or company sell or dispose of, in any one year, a larger quantity than the number of tons contemplated in the application for the license, he shall return to the Comptroller under oath, a statement of such excess sold, and

also return the amount of money due the State for a license for such excess sold, to be rated at Two Dollars for every additional one hundred tons or part of one hundred tons.

Sec. 3. And be it enacted, That it shall be the duty of the Maryland Agricultural College to analyze all samples of fertilizers sent to it for this purpose from any farmer, planter or grower or manufacturer of this State, and purchased by him in this State, without charge, and send to the person sending said samples the result of said analysis, and it shall be the right and privilege of every farmer, planter or grower residing in this State to send samples of fertilizers purchased by him, said specimens not to be less than 25 pounds in quantity, and to be taken from the top, middle and end of the bag or package, and mixed together in the presence of two witnesses.

Sec. 4. And be it enacted; That the funds received by the Comptroller from the licenses issued under this Act, shall be paid into the Treasury, and be set apart as a specific fund, to pay the costs and expenses for conducting the analysis provided for in Section 3 of this Act, and the Treasury shall annually pay over to the Maryland Agricultural College the money received from the sale of said licenses, provided that no larger sum than \$2,000 shall be paid over in any one year.

Sec. 5. And be it enacted; That whoever sells or offers for sale a Commercial Fertilizer without first taking out the license required by this Act, or without the label required by this Act, or with a label stating that said fertilizer contains a larger percentage of any one or more of the constituents mentioned in Section 2 of this Act, than it actually contains, or shall fail to return the statement of excess sold, as provided in Section 2, shall, on conviction thereof, in any court of competent jurisdiction, be fined not more than \$200.

Sec. 6. And be it enacted; That this Act shall take effect from the date of its passage.

[ED.—We received a copy of this Bill just as we were going to press and have not had time to examine it; we give it to our readers as it was received by us, and in our next No. we will have something more to say in regard to it and its operations.

To the Editor of the Maryland Farmer.

CARP CULTURE.

After a two years' trial I am disposed to commend the culture of German carp to any farmer. While some declare that the flavor of this fish is "decidedly off," I do not find it so; and while it is not so palatable as some, I am sure it is as agreeable to the taste as the average of the fish to be found on the tables of this country. This fish grows very rapidly and by the second year has attained a good size. It requires so little attention and multiplies so rapidly that I believe this is the cheapest, as it is the easiest way for the farmer to make a supply of meat. And this meat is healthful, not only of itself, but because it affords a change from the everyday dish of pork, and increases the variety of the daily fare. This fish certainly makes a cheaper dish than poultry.

What is required is water; not clear, running, cool water, but muddy, standing warm water does as well as any. While the mud is no detriment, it is no advantage. Some attempt to be overkind to these fish, giving them clear, cool water and as a result meet with disaster. The pond must have a muddy bottom at least. The fish are voracious feeders, and should be fed. They will be thankful for almost anything you would eat. I find a very good and likewise an economical food in cornmeal. The best way to feed it is to make a small bag of some open stuff—gunny sack is excellent—and fill it *solid* with the meal. It will sink to the bottom, become wet but slowly and the fish will work it out as it becomes wet.

Do not pay for the young carp. Some people are advertising them, but it is not necessary to pay for them, as the Government furnishes them free and so do quite a number of the States. You can grow them successfully in any pond that does not lose all its water at any time of the year. But if there is an outlet to the pond, the overflow must not be swift. It is best to make a pond especially for them on level land, as the stagnation of the water will not hurt them.

St. Louis, Mo.

S. M. J.

Show the FARMER to your neighbors and ask them to subscribe.

LIVE STOCK REGISTER.

DRIVING AT NIGHT.

FANCY OF NORTH OAKS.

We present to our readers this month a portrait of the Aberdeen-Angus cow, Fancy of North Oaks, owned and bred by James J. Hill, of St. Paul, at North Oaks. Without the slightest preparation, as a calf, she gained first prize at Minnesota State Fair and was a member of the third prize herd in the grand sweepstakes for all breeds; also second prize at the Northwestern Exposition at Minneapolis, and member of herd that was awarded the Minnesota Breeders' special premium and second prize Angus herd, in 1883. The *Dakota Farmer* gives the following description of North Oaks Farm. "It is situated some ten miles due north of St. Paul, and is approached by a new road, constructed almost entirely by Mr. Hill. From the suburbs of St. Paul to the farm the road runs through a most picturesque portion of the country, and is graded and drained the entire distance. The original tract of land comprised about 3,000 acres. Since it has fallen into Mr. Hill's possession he has added several smaller farms, until at present North Oaks covers an area of 5,000 acres of the choicest land. It constitutes an ideal institution, which would be a paradise in its verdant productiveness and ease of culture in the eyes of the struggling and impoverished husbandman of some sections, where worn-out soils, scant crops and poor land compel him to live literally "by the sweat of his brow," and oftentimes afford but a stinted existence at that."

Pleuro-Pneumonia Commission.

The Governor has appointed three good men for the State Live Stock Sanitary Board, viz: Messrs. Alex. M. Fulford, of Harford; T. Alex. Seth, of Baltimore, and John Brady, of Montgomery. The sum appropriated for this purpose is \$10,000 a year.

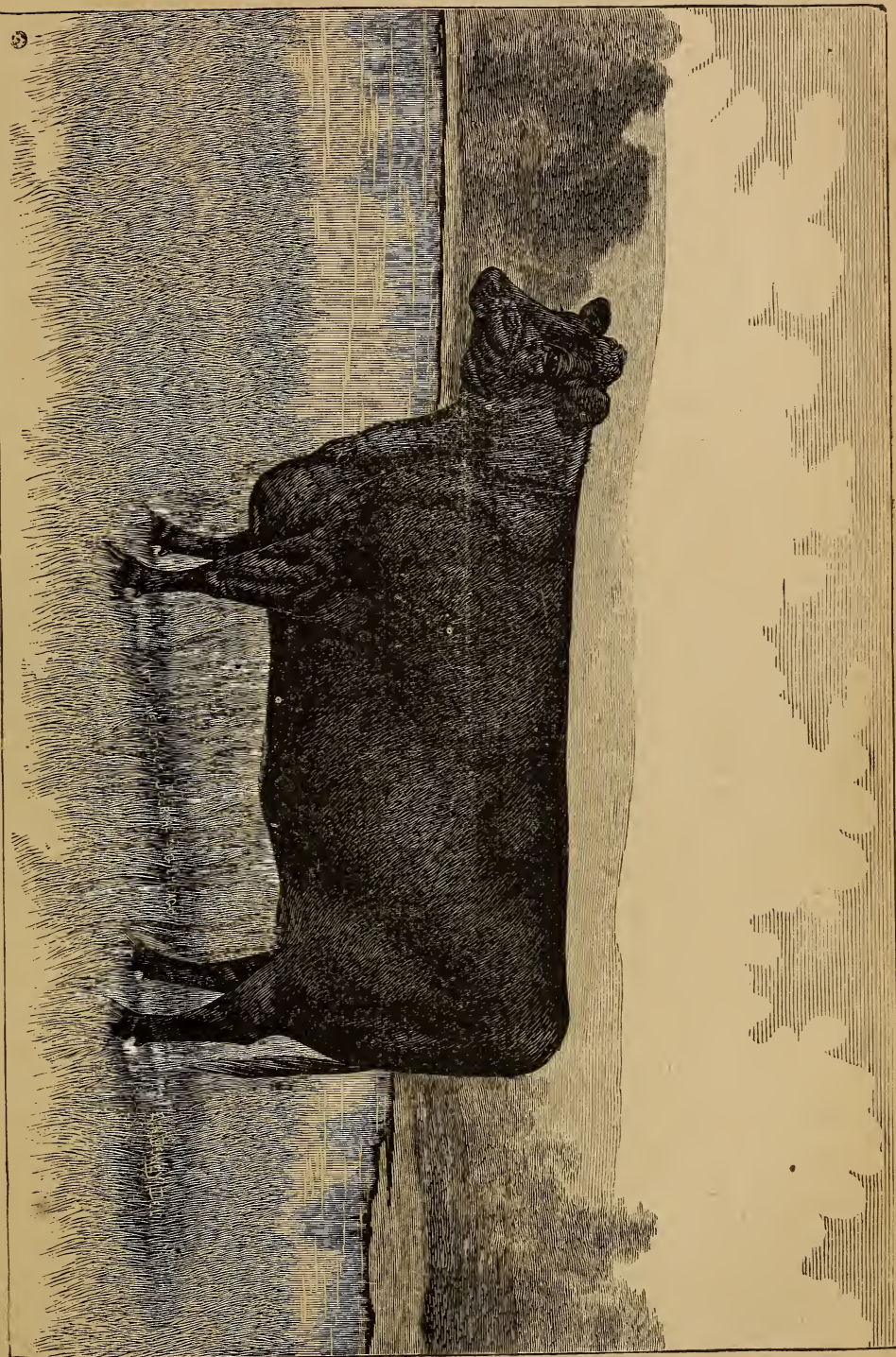
How to illuminate a road in front of the horses in driving at night is an important matter.

The usual side lamps on carriages, or the attaching of a lantern to the dash board, fail to reflect the light where it is most wanted, and the suspending of a lantern to the front axle is objectionable for many reasons, but it is the best plan for shedding the light where it is the most needed that we have seen tried.

But a Philadelphia physician suggests the attaching of the lantern to the breast collar of the harness, which he says he has tried with perfect satisfaction; and he has evidently had some experience with the ordinary methods of lighting, for he says the various forms of dash lights are pretty much the same, in that they put the light just where it is not wanted, illuminating the horse's tail and hips and the buggy thills with a brilliance quite unnecessary, which intensifies the blackness of the shadow cast by them just where one most wishes to see clearly.

"My light is a common tubular lantern, with a reflector, and a spring for attachment to the dash. In place of putting it on the dash, I slipped the spring over the middle of the breast collar, directly in front of the horse. Every part of the road in front of me was plainly seen, so I could drive with as much confidence as in broad daylight. The conditions necessary for success are a level headed horse, with fair breadth of chest, and a shoulder strap attached to the check hook, to prevent the lantern from sagging down between the horse's legs when for any reason the traces slack. It would be well to have a short strap sewed to the inside of the breast collar, to slip the spring through, so as to prevent any lateral motion.—*Ex.*

AMONG CHILDREN there is no plague that eats away life's energies so rapidly as that of worms, which are the outgrowth of blood impurities. They are detected by nervous restlessness, unnatural appetite for food, hollow, sunken eyes, and a general bodily uneasiness. Parents should note these symptoms, and relieve the little ones by the use of "Vinegar Bitters."



ABERDEEN-ANGUS COW, FANCY OF NORTH OAKS. PROPERTY OF JAMES J. HILL, NORTH OAKS FARM, ST. PAUL, MINN.

FOUR TONS OF HAY PER ACRE.

On the Michigan Agricultural College farm there were grown the past year, on twenty-two acres, sixty tons of clover and timothy at first cutting, and at the second cutting, twenty tons, making eighty tons in all, or nearly four tons of hay per acre. The figures can be studied and pondered over by farmers with much advantage. The report on yield of crop for November, issued by the Department of Agriculture at Washington, gives the average yield of hay per acre for the country at large during the past season to be one and one quarter tons, which makes a total yield of about 47,000,000 tons for the country.

Suppose the yield had been $2\frac{1}{2}$ tons per acre. The crop would have been doubled, or 94,000,000 tons. The yield then per acre would fall short of the yield of the twenty-two acres an amount equal to the actual yield of the country. It may be said that there must have been peculiarly favorable climatic conditions present that so large a yield was obtained, but when it is seen that the average yield of the state of Michigan, as shown by the department report, was but little better than that for the whole country, it being 1 3-10 tons per acre, it is evident that the large yield must have been due largely to good culture.

What an immense sum of money would the 47,000,000 extra tons of hay represent. At \$5 per ton, a low price, it would amount to \$235,000,000; and an increase of another ton and a quarter per acre would have made \$470,000,000 worth more of hay than was raised, an immense sum to be divided among those farmers who are engaged more especially in growing hay. It is true, that while it may be possible to grow four tons or more of hay per acre, with the use of a large amount of costly fertilizers and the expenditure of considerable labor, the increased cost might overbalance the increased gain. With every crop there is probably a point beyond which it is not wise to go in attempting to increase the yield; for, while we may go beyond that point in yield, it will be at an increased cost and lessened profit.

Just as it is in feeding cattle; while young they use economically the food given them, and there is profit in their gain; but as the animal grows older its gain costs

more and more until a point is reached when a pound of gain costs as much to make as it is worth, and any additional gain costs more than it will bring in the market. There are many big cattle and hogs that have been kept and fed so long that they have "eaten their heads off." Yet when we see the discrepancy between one and a quarter tons of hay per acre and four tons, and more, that have been grown from the same amount of land, it is evident that our hay crop, if there is any money in it at all, could be largely increased before the point was reached beyond which the cost would exceed the profit.

There is no manner of doubt that our hay crop could be about doubled at a cost not exceeding the present cost one-fourth. Remember that the same amount of money is invested in the land, whether one ton of hay or four are harvested, the taxes will be the same, the cost of fencing the same, it will take as long to sow the seed, as long to mow and rake, and the tools will cost as much. The increased cost comes in extra preparation of the land, extra fertilizers and extra labor in securing the crop after it is raked. When a man has \$40 or \$50 invested in land, or is paying interest on a mortgage for the amount, together with money in teams, tools, etc., has to pay taxes for hired help, and put his own labor in besides, it behooves him to see that his investment returns him all it can be made to.

A COMPANY DINNER.

All preparations that can possibly be made the day preceding the dinner are so much clear gain. Not only may orders to marketmen and grocer be given, but the soup may be made, the veal or sweetbreads cooked for the scallops, the almonds roasted and salted and the jelly and cake made. Leave little in the culinary line until the last moment, and superintend the setting of the table yourself. Have plates, dishes, finger bowls, fruit, everything that will be needed, conveniently arranged in the pantry, the service for each course by itself. See that oil and vinegar flasks are filled and placed with the powdered sugar, salad bowl, fork and spoon; that the spoons or forks needed are with the dessert saucers, that each finger bowl is filled and has its napkin or doyley and plate under it and

its fruit knife beside it. A dainty addition is that of a carnation, or a bit of geranium, or citron alone floating in the finger bowl. It is less stereotyped than a slice of lemon and is preferable to any perfumed waters. Let the coffee tray have cups, saucers and tiny spoons, sugar bowl and creamer arranged upon it, only needing the coffee pot to be complete.

Few mistresses have sufficiently well-trained servants to obviate the necessity of personal supervision of these minutiae, and much sinking of heart and dreading of defects and omissions will be spared the hostess by half an hour's work in the dining room before she goes to make her toilet. Servants, too, feel company less of a burden if a little assistance of this kind is given them. Even with an experienced butler it is well to have a complete bill of fare clearly written out and tacked up in the pantry. Mark on it where forks, knives or plates must be changed, and give orders that the articles needed later in the dinner shall be washed *immediately* upon their removal from their first service. Few things are more disagreeable than to have plates or spoons to be used for salad or ice cream come on the table smoking from the hot water from which they have just been drawn.

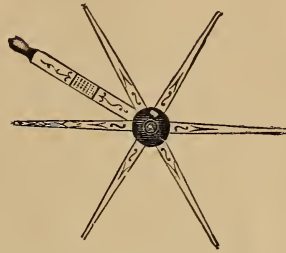
These preparations attended to, the hostess may array herself in her dinner gown and await the arrival of her guests, with a reasonable conviction that everything will pass off smoothly, and above all, with the firm determination that, come what may, she will make no apologies.

—CHRISTINE TERHUNE HERRICK, in *Good Housekeeping*.

MARYLAND.

All domestic animals are looking well after so trying a winter of rains and snows, and are, indeed, in better condition than could have been expected. There has been no prevailing disease among horses this year worth mentioning. With horned cattle pleuro-pneumonia has been much exaggerated, and has always been confined in this State to small localities; yet even these have been under control.—*Agr. Dept.*

THE "IXL" LAND MEASURER.



This is one of the handiest tools on a farm. It is manufactured by D. H. Bausman, Lancaster, Pa. You can measure land (and distances) just as fast as you can get over the ground.

Each machine is carefully made and adjusted to exact size. They are handsomely finished and have complete printed directions and rules for measuring land, etc., that anyone can understand. One can be seen at this office and furnished on receipt of \$2.00.

THE PLOW SHOE.



This is a good article. The shoe is designed for taking plows from place to place without unhitching team and can be carried on side of plow at all times, if desired. In this way plows may always be housed, which will save its cost in a single year.

These shoes are stoutly made out of seasoned oak, with wrought-iron soles. We can furnish them for \$1.50 each.

Stay in the Country.

We advise every country boy and girl to stay in the country. The city is crowded with boys and girls who are wearing away their lives in the effort to make a decent living. In the country you have the good necessities—food and clothing and shelter—with scarcely a thought as to their value. In the city these three items consume the mind, the heart, the very bodily strength of the young in the struggle to obtain them. Only now and then one of them succeeds in obtaining more than a small part of what were their common lot in this respect before coming to the city.

POULTRY HOUSE.

WHITE WYANDOTTES.

We are indebted to Mr. Geo. A. Preston, of Binghampton, N. Y. for the following cut and description:

"Regarding the White Wyandottes, which are already beginning to attract the attention of some of the most enterprising fanciers. I would say my experience with them has been pleasing and satisfactory.

style of symmetry, form and carriage, and tried again, until I gained a snowy White Wyandotte, magnificent in plumage and symmetry, and of standard weight. And a very pretty bird they are, too, having small rose combs and red face and wattles, which present a most pleasing contrast with their pure white plumage. Their stout, blocky form and clean, yellow legs recommend them to the farmer and market poultryman. We are glad to see the poultry journals already recommending them and favoring their admittance into the "Standard."



WHITE WYANDOTTES, BRED AND OWNED BY GEO. A. PRESTON, Binghampton, N. Y.

Some seven years ago I noticed some of my laced birds of this variety "running" very light in color, and every Wyandotte fancier knows that this is the natural tendency of this fowl, and that one of the most difficult parts of our work is to mate them so as to keep them down to a medium dark lacing. I determined to experiment with these white sports, as I called them, and so selected out a pen of my very lightest birds, and from the result, each season, I culled down close, and then mated for my

As to the origin and originator of the White Wyandottes the honor has been justly credited by the poultry journals to Mr. Geo. H. Towle.

March 8th, Mr. Towle sent word to me by his son that his health had failed him and he could no longer keep up with his correspondence and do justice to his patrons, and rather that let the result of his years of hard work in perfecting these fowls lay idle at this time he would sell me his entire stock, which I bought at once, knowing

that by uniting them with my own fine stock it would bring together two strains entirely unrelated, which would necessarily add wonderfully to the vigor of the fowl, and give me strong and healthy chicks. I have mated up three grand breeding pens of these birds, and my illustrations in my circular will represent them. They are strong and hardy above that of most white fowls, and their color being a solid one, also all the fancy points being natural to the fowl, I believe they are in all respects the peer to their laced cousins.

GEO. A. PRESTON.

HARDINESS OF POULTRY.

The first requisite necessary in the choice of a breed of chickens is undoubtedly that they should be hardy, well able to endure cold weather and exposure. Just as certainly, too, the barn-yard fowl is the best to fill this necessity. It is on this account that so many are found to cling to the common mongrel stock, and claim that they are the best for the farmer. They are hardy under neglect, also, as well as in respect to the weather, and in these points no imported or improved breeds can compare with them.

Next to the barn-yard fowl, called such to distinguish them from pure bred stock, come the Asiatic breeds. and there is but very little choice between them. They may all be ranked among the most hardy of fowls so far as the weather is concerned. They will not, however, bear neglect as well as some others, for they are none of them active self-providers. They require attention and feeding to a much greater extent than the smaller and more active breeds.

The European breeds, admirable in many other particulars, are far less hardy than either the barn-yard or the Asiatic. They are not as well feathered, and cannot endure cold. It is on this account that they can so seldom be relied upon for early spring chickens or for eggs during the winter.

Hardiness and general healthfulness seem to go together, and the most hardy is generally the most healthy in all respects. In only one particular does the Asiatic fowl surpass the common barn-yard fowl in hardiness. It will endure better very close confinement without any effect upon its general health. It is the only class of poultry which can be contented or profitable in close quarters.

While in this hardiness we give the first place to the barn-yard mongrels, we by no means on this account consider them at all to be preferred, for in almost every other particular the pure bred stock are far in advance of them.

THE CARE OF CHICKS.

This month of May is generally the season when the large majority of chicks are hatched. They should be hatched in the month of April, but they are not, and May comes before any great number have broken the shell. March and April chicks are much preferable to May chicks, because they commence to lay early in the winter. In May, however, it is much less trouble to care for them, as they generally need no protection from the cold other than what the mother hen can give them. Still they should be carefully looked after as to water and feeding. As the warm days approach, 25 or 30 chicks may be given to one hen, and she will care for them well. She must, however, have the very best opportunity for dusting herself and you should manage to have her use plenty of sulphur in her dust. The chicks need nothing to eat for 24 hours after they are hatched, but after that they should be fed regularly every two or three hours. Give them plenty of milk to drink, and wheat bread crumbs, then add to these baked corn bread which will be found the very best of food for them. After a couple of weeks small grains of wheat or pop-corn,

should be one meal of the four or five during the day. If they are confined where they can get no grass, give them some vegetable food, such as boiled potatoes mixed with scalded meal or bran, and bring them a grass sod occasionally. This management with plenty of pure water will generally bring them through the perils of chickenhood with safety.

EXPERIMENTS.

We have examined with considerable care the various experiments, covering a period of twenty years, as given in a series of pamphlets which we have received from Sir J. B. Lawes. His examinations have been well chosen, and are always of the highest value to thoughtful and practical farmers. His experiments on the culture of wheat for forty years on the same plot of ground are worthy of study, while those relating to ensilage should receive much more than a careless reading. The dissertations on the composition of soils and on the value of manures remaining in the soil after cropping are themes to interest the agricultural chemist and the scientific farmer. We cannot give Sir J. B. Lawes too great credit for the interest he has taken, and the great benefit he has accomplished by his experiments for the agricultural world. His work is by no means confined to England; but every farmer throughout the world has reaped the advantage of the knowledge he has acquired by his forty years' patient labor, and his records so faithfully kept.

Area and Condition of Wheat.

The statistical investigation for April makes a reduction of winter-wheat area of about 3,500,000 acres from the breadth of seed two years ago, and 5 per cent. reduction from the area seeded a year ago. On the Atlantic coast there has been very slight reduction, and none on the Pacific coast.—*Agr. Dept.*

FLOWERS.

We have received the following communication from one of the young ladies at Lutherville Seminary. It pleases us to give it a place in our columns; it was written in the usual course of school exercises and shows a young scholar's work:

"Few seem to realize how much flowers help to brighten this world. What is more welcome to the sick-room or to the prisoner's cell than flowers? They come as sweet messengers from God telling us of goodness, and cheering the lonely heart. Flowers have become almost indispensable to the adornment of churches, and form the decoration for weddings, parties, etc. As they take their part in festivity and gayety, so they also adorn the grave, ever sweet emblems of our own lives, born to blossom and brighten many hearts and places, sometimes to be cut down in the very unfolding of the bud. It would be almost impossible to numerate the different variety of flowers. The rose is acknowledged the queen and in it is combined beauty and fragrance. Some roses are much more beautiful and expensive than others.. The hundred-leaf rose was cultivated by the ancients and from it is made 'otter of roses,' a very delicious and rare perfume. The rose is the emblem of England. M.

HON. EDWARD STAKE, the able representative from Washington county in the late legislature, is the author of the "Fertilizer Bill" which will be found in this issue of the MARYLAND FARMER. It is believed that this Bill will be of great importance to the agricultural interests of Maryland, and farmers are under great obligations to Mr. Stake for its introduction and passage. The Maryland Agricultural College has been entrusted with the analyses of the fertilizers as it has all the facilities for doing the work. Several other States have similar laws which, we understand, have been of as much benefit to the manufacturer as to the farmer. Fertilizer manufacturers and farmers should be closely united on this subject and work together, since what is for the interest of the one is also for the interest of the other.

LET US STOP AND THINK.

In the following clipping, from the *National Live Stock Journal*, there is an amount of wisdom which we commend to the thoughtful consideration of our readers. The times are noted for impatient looking towards immediate results—a disposition on the part of the people to hurry forward—a refusal to wait for the maturing of plans. They condemn before they understand the reason of delays. The wisdom is good for all sections:

“Our agricultural schools are not in everything what they might be, and probably will be, some day—‘Rome was not built in a day;’ mere fault-finding remedies nothing, and the amount already invested in our schools must be utilized, not neglected. Let those who feel prejudiced against our Agricultural Colleges, and disposed to join in hostile criticism, pause long enough to ask themselves the question, ‘What do we know about them?’”

 ERRATA.

Our readers know that in every printing office there is a character popularly known as “the devil.” We find that in our March number he got fast hold of an article called “Men to be Honored,” and at the top of the second column inserted FOUR LINES which should have been at the bottom of that column, making it impossible to obtain any meaning of the article. The copy had been read before it was made into the form, and marked correct. Will the readers who may have been puzzled over this erratum please make the transfer, and thus get it correctly as delivered. This should have been noticed in the last number, but was not observed in season.

 OUR THANKS.

Will the Massachusetts Horticultural Society accept our thanks for the invitation we have received to visit their exhibitions? We shall try during our Northern trip this summer to spend a short time with them some Saturday afternoon.

AN EXCELLENT REPORT.

It is a work of no small magnitude to attempt an examination in detail of the New York Experiment Station report. The mass of figures is in itself the evidence of exhaustive work, and many of the trials as to feeding stock require a patient comparison to show results of the best methods. The entire reports on seeds, on vegetables, on corn and on tomatoes, are worthy of the farmers of the Empire State.

We must be permitted here to give our tribute of honor to E. Lewis Sturtevant, the able Director of this Station, whose words are of great weight wherever his painstaking experiments are known. Being very careful to make no unfounded assertions, he carries with him the respect of the best practical agriculturists; and his assertions when finally promulgated, become worth of the closest examination by the most practical minds of the agricultural world. He has earned the position he holds, by the force of well directed labor in behalf of the farmers of the State of New York, and the report we have been considering is only one more evidence of his case being the right man in the right place.

 THE SOUTHERN CULTIVATOR,

The *Southern Cultivator*, of Atlanta, Ga., makes its welcome appearance in our office as regularly as the months roll round. Although in its forty-fourth volume, it shows all the vigor and much more than the sprightliness of its youth. In the variety of its contents and the sturdy common sense it displays in its comments upon all subjects of interest, it commands our admiration. We place it among the very best journals that belong to our list of exchanges. We have noticed from time to time how easily it absorbs the publications throughout the region over which it reigns with such benignity and grace. We cannot pretend to enumerate the list of its triumphs.

THE NEW SOUTH.

This beautifully printed and finely illustrated monthly paper has removed its office of publication from Columbus, Miss., to Birmingham, Ala. Perhaps our readers are not aware that this latter place is one of the most thriving cities of our great country, and has the prospect of becoming the largest and most wealthy of the young cities of the Sunny South. Birmingham is located on the northern side of a mountain of iron ore, and it is to this fact that it owes its rapid progress. Since 1880 it has increased five-fold in population, and its taxable property has increased from three millions and a quarter to upwards of eleven millions of dollars. Coal as well as iron is in its immediate neighborhood, and is afforded at \$1.00 to \$1.25 per ton. "The New South" gives us an enthusiastic account of the resources of its new home, and extends an earnest and hearty invitation to Northern capitalists, farmers and laborers to make their home in and around Birmingham. Undoubtedly the South is the attractive section of our country at present, and is dividing the attention of the immigrant with the West. As the South becomes better known, its climate and resources more generally appreciated, it will command undoubtedly a great part of that immigration which has hitherto been directed to the colder regions of our country and to Canada. We are sure the South has a great future before it.

THE CENTREVILLE RECORD.

We take notice that this sprightly paper has put on a new dress of type and enlarged its borders. Its appearance is extra clear, showing evidence of taste in its "make up" and skill in the handling of all the interesting topics of the day. Long may it thrive.

NATIONAL FARM AND FIRESIDE.

The office of this paper has recently been removed to 120 and 122 West Baltimore street. We take pleasure in being able to say of the *Farm and Fireside* that it is one of the most independent and active Grange papers with which we are acquainted, and we congratulate it upon its new and improved location, and wish it abundant prosperity in the future. We commend it to the hearty support of all Grangers, and as it is a weekly paper, they cannot do better than adopt it for their organ.

INSECTS.—THE ORANGE.

From the U. S. Department of Agriculture we received a voluminous and very thorough Exposition of the Insects affecting the Orange, by H. G. Hubbard with a very fine array of plates giving the appearance of the insects in detail. We think this will prove a very welcome document for Florida and California Orange growers, and we are pleased to make record of it with our thanks to Prof. Chas. V. Riley, the skilled entomologist of the Department.

THE NEW ENGLAND FARMER is a paper from which we often have occasion to quote. We have noticed the change of proprietorship, and with it a general improvement in the periodical. We are pleased, however, to find the familiar name of our old friend, A. W. Cheever, in the agricultural editor's place. His chair is well filled, and few could be found to fill it so worthily. It is a bright, readable paper, and must be of great value to its subscribers. May they increase by the thousands to the benefit of all concerned.

Subscribe to the "Maryland Farmer," \$1.00 per year with a valuable premium.

A TERRIBLE CONFESSION.

A PHYSICIAN PRESENTS SOME STARTLING FACTS.

Can it be that the Danger Indicated is Universal.

The following story—which is attracting wide attention from the press—is so remarkable that we can not excuse ourselves if we do not lay it before our readers entire:

To the Editor of the Rochester (N. Y.) Democrat:

SIR;—On the first day of June, 1881, I lay at my residence in this city surrounded by my friends and waiting for death. Heaven only knows the agony I then endured, for words can never describe it. And yet, if a few years previous any one had told me that I was to be brought so low, and by so terrible a disease, I should have scoffed at the idea. I had always been uncommonly strong and healthy, and weighed over 200 pounds, and hardly knew in my own experience, what pain or sickness were. Very many people who will read this statement realize at times they are unusually tired and can not account for it. They feel dull pains in various parts of the body and do not understand why. Or they are exceedingly hungry one day and entirely without appetite the next. This was just the way I felt when the relentless malady which had fastened itself upon me first began. Still I thought nothing of it, that probably I had taken a cold which would soon pass away. Shortly after this I noticed a heavy, and at times neuralgic, pain in one side of my head, but as it would come one day and be gone the next, I paid little attention to it. Then my stomach would get out of order and my food often failed to digest, causing at times great inconvenience. Yet even as a physician, I did not think that these things meant anything serious. I fancied I was suffering from malaria and doctored myself accordingly. But I got no better. I next noticed a peculiar color and odor about the fluids I was passing—also that there were large quantities one day and very little the next, and that a persistent froth and scum appeared upon the surface, and a sediment settled. And yet I did not realize my danger, for, indeed, seeing these symptoms continually, I finally became ac-

customed to them, and my suspicion was wholly disarmed by the fact that *I had no pain* in the affected organs or in their vicinity. Why I should have been so blind I can not understand!

I consulted the best medical skill in the land. I visited all the famed mineral springs in America, and traveled from Maine to California. Still I grew worse. No two physicians agreed as to my malady. One said I was troubled with spinal irritation; another, dyspepsia; another, heart disease; another, general debility; another, congestion of the base of the brain; and so on through a long list of common diseases, the symptoms of many of which I really had. In this way several years passed, during which time I was steadily growing worse. My condition had really become pitiable. The slight symptoms I at first experienced were developed into terrible and constant disorders. My weight had been reduced from 207 to 130 pounds. My life was a burden to myself and friends. I could retain no food on my stomach, and lived wholly by injections. I was a living mass of pain. My pulse was uncontrollable. In my agony I frequently fell to the floor and clutched the carpet and prayed for death! Morphine had little or no affect in deadening the pain. For six days and nights I had the death premonitory hiccoughs constantly! My water was filled with tube-casts and albumen. I was struggling with Bright's Disease of the kidneys in its last stages!

While suffering thus I received a call from my pastor, the Rev. Dr. Foote, at that time rector of St. Paul's Episcopal Church, of this city. I felt that it was our last interview, but in the course of conversation, Dr. Foote detailed to me the many remarkable cures of cases like my own which had come under his observation. As a practicing physician and a graduate of the schools, I derided the idea of any medicine outside the regular channels being in the least beneficial. So solicitous, however, was Dr. Foote, that I finally promised I would waive my prejudice. I began its use on the first day of June, 1881, and took it according to directions. At first it sickened me; but this I thought was a *good sign* for one in my debilitated condition. I continued to take it; the sickening sensation departed and I was finally able to re-

tain food upon my stomach. In a few days I noticed a decided change for the better, as also did my wife and friends. My hiccoughs ceased and I experienced less pain than formerly. I was so rejoiced at this improved condition that, upon what I had believed but a few days before was my dying bed, I vowed in the presence of my family and friends, should I recover I would both publicly and privately make known this remedy for the good of humanity, wherever and whenever I had an opportunity, and this letter is in fulfillment of that vow. My improvement was constant from that time, and in less than three months I had gained 26 pounds in flesh, became entirely free from pain and I believe I owe my life and present condition wholly to "Warner's Safe Cure," the remedy which I used.

Since my recovery I have thoroughly re-investigated the subject of kidney difficulties and Bright's disease, and the truths developed are astounding. I therefore state, deliberately, and as a physician, that I believe *more than one-half the deaths which occur in America are caused by Bright's disease of the kidneys.* This may sound like a rash statement, but I am prepared to verify it fully. Bright's disease has no distinctive features of its own, (indeed, it often develops without any pain whatever in the kidneys or their vicinity,) but has the symptoms of nearly every other common complaint. Hundreds of people die daily, whose burials are authorized by a physician's certificate as occurring from "Heart Disease," "Apoplexy," "Paralysis," "Spinal Complaint," "Rheumatism," "Pneumonia," and the other common complaints, when in reality it is from Bright's disease of the kidneys. Few physicians, and fewer people, realize the extent of this disease or its dangerous and insidious nature. It steals into the system like a thief, manifests its presence if at all by the commonest symptoms and fastens itself in the constitution before the victim is aware of it. It is nearly as hereditary as consumption, quite as common and fully as fatal. Entire families inheriting it from their ancestors have died and yet none of the number knew or realized the mysterious power which was removing them. Instead of common symptoms it often slows none whatever, but brings death suddenly,

from convulsions, apoplexy or heart disease.

As one who has suffered, and knows by bitter experience what he says, I implore every one who reads these words not to neglect the slightest symptoms of kidney difficulty. No one can afford to hazard such chances.

I make the foregoing statements based upon facts which I can substantiate to the letter. The welfare of those who may possibly be sufferers such as I was is an ample inducement for me to take the step I have, and if I can successfully warn others from the dangerous path in which I once walked, I am willing to endure all the professional and personal consequences.

J. B. HENION, M. D.

Rochester, N. Y., Dec. 30.

Book's, Catalogues. Publications, &c.

SALOAMBO.—A volume by Flaubert, translated by M. French Sheldon, neatly bound in cloth, 422 pages. Saxton & Co., London and New York. This is one of those stories of knightly encounter and heroism, such as were delightful to us in our young days, and the flavor of which remains with us in our riper years. The prodigies of valor around Carthage and the power of trained men and elephants, in war and in siege, so wonderful, have a fascination that makes Salambo a readable book.

WATKINS' ADVERTISER'S GAZETTE.—This is a well arranged pamphlet for the help of those who would advertise largely, at a reasonable expense. The newspapers and magazines are classified not only as dailies, weeklies and monthlies, but also into distinct departments of life, as periodicals relating to Agriculture, Medicine, Religion, Literature, Science, Education, &c. Address, J. L. Watkins, Prospect, Ohio.

OGILVIE'S POPULAR READING.—We have just received a copy of Number Twenty-nine of Ogilvie's Popular Reading—price only 30 cents—containing eight stories—all complete—and printed in large type, with handsome colored lithograph cover, also a handsome colored frontispiece.

The Maryland Jockey Club.

This celebrated club will hold its Spring Meeting as usual at Pimlico, and will no doubt be a grand success. We were sorry to see Mr. P. Lorrillard's retirement from the turf, but his horses will no doubt be seen here in good hands. This course has become to be one of the most popular in the country. The Spring Meeting, it is predicted, will be one of the most brilliant in the annals of the American turf.